

Production/Admin:  
Date  
Received/Costing  
Initial

Location

Initials of receiver (if shipment OK) Level 12

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Discrepancies

Release Note Attached: ☒ Yes ☐ No  
Waybill Attached: ☒ Yes ☐ No  
Shipment Complete: ☒ Yes ☐ No  
QC6 Inspection ☒ Yes ☐ No  
Work Order ☒ Yes ☐ No

Packing Slip: ☒ Yes ☐ No  
Invoice: ☒ Yes ☐ No  
Receipt: ☒ Yes ☐ No  
Cash: ☒ Yes ☐ No  
Cr: ☒ Yes ☐ No

Date: 11/6/23  
Supplier: THYSS-KRUPP  
Batch No: M18106  
Part P/O: 14312

Signature: [Signature]  
Date: 11/6/23

Comments: N/A  
N/A  
N/A  
N/A  
N/A

# Purchase Order Receipt Listing

Thursday, June 23, 2011 7:45:40 AM

All amounts are calculated in domestic currency.

All Vendors PO ID PO14312 Receipt Dates from 6/23/2011 to 6/23/2011 All Line Item Types  
All Item ID/GL/WOs All Rec. Employees All Currencies  
Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp	Project ID	Reference/ Description/ Cert Std	PO U/M/ Stock U/M	Required Date	Recv Date/ Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MIRB Qty/ MRB Reject Qty	Book Amt
Vendor ID/Vendor Name VC-COP001 Thyssenkrupp Materials CA Ltd											
PO14312	2		M303B1.000X1.000 f		6/24/2011	6/23/2011	12.0000	\$16.54	0.0000	12.0000	\$198.49
CAD	No		303 BAR 1" X 1" f		12.0000	DESSJ02		\$198.49	0.0000	0.0000	
			118106								
	3		M6061T6A4.000W.2 f		6/24/2011	6/23/2011	40.0000	\$4.90	0.0000	40.0000	\$196.00
	No		50								
			6061T6 ANGLE 4.00 f		40.0000	DESSJ02		\$196.00	0.0000	0.0000	
			x 4.00 x .250								
			118106								
	4		M6061T6B1.000X02. f		6/24/2011	6/23/2011	24.0000	\$5.21	0.0000	24.0000	\$125.04
	No		000								
			6061-T6 Bar 1.00 x f		24.0000	DESSJ02		\$125.04	0.0000	0.0000	
			2.00								
			118106								
	5		M6061T6R0.750 f		6/24/2011	6/23/2011	24.0000	\$1.19	0.0000	24.0000	\$28.56
	No		6061-T6 Round Bar f		24.0000	DESSJ02		\$28.56	0.0000	0.0000	
			.750"								
			118106								
	6		M6061T6S.032 sf		6/24/2011	6/23/2011	96.0000	\$2.80	0.0000	0.0000	\$268.49
	No		6061-T6 Sheet 0.032" sf		96.0000	DESSJ02		\$268.49	0.0000	0.0000	
			118106								

Total Received Quantity: 196.0000  
Total Qty to Inspect (PO U/M): 0.0000  
Total Reject Quantity: 0.0000  
Total Receipt Value: \$816.58  
Total Balance Due Quantity: 0.0000

24

Ship Date 23 Jun 11 at 14:01 From PFWM  
No: PEG 717082

Ship Date 23 Jun 11 at 14:01 From PFWM  
Via VIM TRANSFER TRUCK  
FOB CONCORD  
Frt PREPAID  
Route 0 - 0 Manifest  
Trailer  
Slp STAN IVERS (905-532-1350)  
Sold To: (20115)  
DART AEROSPACE  
1270 ABERDEEN ST  
HAWKESBURY, ON K6A 1K7

Ship From:  
THYSSENKRUPP MATERIALS NA  
2821 LANGSTAFF ROAD  
CONCORD, ONTARIO L4K 5C6  
Tel: 905 669 9444 Fax: 9057389033

Ship To: (1)

DART AEROSPACE  
1270 ABERDEEN ST  
HAWKESBURY, ON K6A 1K7  
Tel: 613-632-9577 Fax: 613-632-1053

B I L L O F L A D I N G - REPRINT

Quantity 12 FT PCS 1  
Wt LBS 35

1) Our order PEC-342920-1 Your PO # 14312  
STAINLESS STEEL SQ BAR 303CD  
Heat Number A11488  
Tag No 207257

Quantity 96.00 SFT PCS 2  
Wt LBS 43

3) Our order PEC-342920-2 Your PO # 14312  
ALUMINUM SHEET 6061 T6  
Heat Number 500103  
Tag No 493873

Quantity 2 Tags 3  
Wt LBS 78

\*\*\*\*\*ADD ON TO 342792 SUR-CHARGE PAID\*\*\*\*\*

WILL TEST REPORTS, PACKING SLIPS ARE TO SENT  
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR  
TO SHIPPING.  
ATTN: CHANTAL/LINDA  
\*\* ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER \*\*  
\*\* REFERENCED ON IT \*\*

TOTAL OF 1 TUBE, 1 CUSH GR.W. 102 LBS  
ITEM-1---1 TUBE  
ITEM-2---1 CUSH

Page: 1 ...Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ETRE  
RAPPORTÉES IMMÉDIATEMENT.  
ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY  
RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.  
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION

DATE

B I L L O F L A D I N G  
Ship Date 21 Jun 11 at 7:47 From PFW  
No: BEC 716757

Via VIM TRANSFER TRUCK

FOB CONCORD

Prepaid

Route 0 - 0 Manifest

Trailer

Slp STAN IVERS (905-532-1350)

Sold To: (20115)

DART AEROSPACE

1270 ABERDEEN ST

HAWKESBURY, ON K6A 1K7

Ship From: THYSSENKRUPP MATERIALS NA  
2821 LANGSTAFF ROAD  
CONCORD, ONTARIO L4K 5C6  
Tel: 905 669 9444 Fax: 9057389033

Ship To: (1)

DART AEROSPACE

HAWKESBURY, ON K6A 1K7

Tel: 613-632-9577 Fax: 613-632-1053

B I L L O F L A D I N G

1) Our Order BEC-342792- 1 Your PO # 14312

ALUMINUM ANGLE 6061-T6511

4.00" X 4.00" X 2.50" X 240.0000"

Heat Number 2BP044

Tag No 206512

2) Our Order BEC-342792- 2 Your PO # 14312

ALUMINUM FLAT BAR 6061-T6511

1.00" X 2.00" X 144.0000"

Heat Number 13132

Tag No 206513

3) Our Order BEC-342792- 3 Your PO # 14312

ALUMINUM ROUND BAR 6061-T6511

.750" DIA X 144.0000"

Heat Number 11050713A

Tag No 206514

Quantity

24 FT

PCS

MTR

Wt LBS

13

TOTAL:

Tags

3

PCS

6

LBS

160

\*\*\* Chemical Analysis \*\*\*

Heat Number

11050713A

13132

2BP044

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT  
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR  
TO SHIPPING.

Page: 1 ... Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ETRE

RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT

MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

DATE

RECÙ EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION  
Q/OST# 1017327981 TQ001 TFS/GST TVH/HST # 140223934 RT0001

**DART** aerospace  
 Dart Aerospace Ltd.  
 1270 Aberdeen Street  
 Hawkesbury, ON K6A 1K7  
 Tel: 613 632 9577  
 Fax: 613 632 1053

**PURCHASE ORDER**  
 Purchase Order ID P014312  
 Purchase Order Date 6/17/2011  
 PO Print Date 6/17/2011  
 Page Number 1 of 3

Order From :  
 THYSSENKRUPP MATERIALS CA LTD  
 O/A VPK METAL-C/O T27540/PO BOX 4275,POSTAL "A"  
 TORONTO, ON M5W 5V8  
 CA

Contact Name  
 Vendor Phone 905 669 9444  
 Vendor Fax 905 738 9033  
 Vendor Account Nbr  
 Buyer Chantal Lavoie  
 Requisition Nbr  
 Tax Resale Nbr 10127-2607  
 Terms Net 30  
 Currency CAD  
 FOB Destination-Collect

Ship To : DART AEROSPACE LTD

1270 ABERDEEN  
 HAWKESBURY, ON K6A 1K7  
 CANADA

PAID  
 6/24/11  
 11/11/11

Line Nbr	Reference	Revision ID	Vendor Part Number	Description/	Mfg ID	Reg Date/	Taxable	Unit of Measure	Reg Qty/	Ship Method	Unit Price	Extended Price
1	M174B0.250X4.000			17-4 SS Bar .250 X 4.00		6/24/2011	24.00	Yours ppd	\$29.6875		\$712.50	

Special Inst: MATERIAL: 17-4 PH SS BAR AS PER AMS 5404/5643  
 GRAIN MUST RUN ALONG LENGTH OF BAR  
 MINIMUM YIELD TENSILE STRENGTH = 100 KSI  
 MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI

2	M303B1.000X1.000			303 BAR 1" X 1"		6/24/2011	12.00	Yours ppd	\$16.5410		\$198.49
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Special Inst: MATERIAL: AISI 303 SS BAR AS PER ASTM A582  
 NOTE: 304/316 NOT ACCEPTABLE  
 6/11/11

3	M6061T6A4.000W.250			6061T6 ANGLE 4.00 x 4.00 x .250		6/24/2011	40.00	Yours ppd	\$4.9000		\$196.00
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MATERIAL CERTIFICATION  
 REQD UPON DELIVERY

Change Nbr: 1  
 Change Date: 6/17/2011  
 No substitution or deviation without consent.  
 Certificate of Conformity or Material Certification required when applicable

Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

**PURCHASE ORDER**  
Purchase Order ID P014312  
Purchase Order Date 6/17/2011  
PO Print Date 6/17/2011

Page Number 2 of 3

Order From : THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL "A"  
TORONTO, ON M5W 5V8  
CA

Contact Name	905 669 9444	Vendor Phone	905 738 9033	Vendor Fax	Vendor Account Nbr
Buyer	Requisition Nbr	Tax Resale Nbr	Terms	Currency	FOB
Chantal Lavoie	10127-2607	Net 30	CAD	Destination-Collect	

4	M6061T6B1.000X02.000	6061-T6 Bar 1.00 x 2.00	6/24/2011	24.00	Yours ppd	\$5,2100	\$125.04
<p>Special Inst: MATERIAL: 6061-T6/T6510/T6511 ALUMINUM BAR AS PER AMS-QQ-A-200/8</p>							

5	M6061T6R0.750	6061-T6 Round Bar .750"	6/24/2011	24.00	Yours ppd	\$1,1900	\$28.56
<p>Special Inst: MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221</p>							

6	M6061T6S.032	6061-T6 Sheet 0.032"	6/24/2011	96.00	Yours ppd	\$2,7968	\$268.49
<p>Special Inst: MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221</p>							

MATERIAL CERTIFICATION  
READ UPON DELIVERY

No substitution or deviation without consent.  
Certificate of Conformity or Material Certification required when applicable

Change Nbr: 1  
Change Date: 6/17/2011

Order From : VC-COP001

THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL-C/O T72540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

**Contact Name**  
**Vendor Phone**  
**Vendor Fax**  
**Vendor Account Nbr**

Buyer	Requisition Nbr	Tax Resale Nbr	Terms	Currency	FOB
-------	-----------------	----------------	-------	----------	-----

Chantal Lavoie  
10127-2607  
Net 30  
CAD  
Destination-Collect

Special Inst:

MATERIAL: 6061-T6/T62 ALUMINUM  
SHEET AS PER

OR AMS 4025  
OR AMS 4027 OR ASTM B209

M2024T3S.032 2024-T3.032 sheet

6/24/2011

Yours pdd 00.96

\$3.1593

\$303.29

Special Inst:

MATERIAL: 2024-T3 ALUMINUM SHEET AS PER

Q0-A-250/4 OR AMS-Q0-A-250/4 OR  
AMS 4037 OR  
ASTM B209

**PO Total:**

**\$1,832.38**

Change Nbr:

1

Change Date: 6/17/2011

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

MATERIAL CERTIFICATION

**Certificate of Test**

**S H I P T O**  
 COPPER & BRASS SALES  
 8001 THYSSENKRUPP PARKWAY  
 NORTHWOOD, OH 43619  
 DISTRICT  
 M BUSH  
 SHIPPED FROM  
 SYRACUSE  
 OUR ORDER NO. P5-17644-0-01  
 DATE 04/25/11

**CUSTOMER ORDER NO**  
 5400087823-R02  
**DESCRIPTION OF MATERIAL**  
 CRU 803 CDA SSS000047  
 ASTM-A582-05 AMS-5640U TYPE 2 ASTM-A484-09 ASTM-A320-08

**CHEMICAL ANALYSIS**

HEAT NO. A11488  
 C 0.056 MN 1.74 P 0.027 S 0.220 SI 0.61 NI 9.42 CR 17.07 MO 0.42 CU 0.43

**MECHANICAL PROPERTIES**

HEAT NO. A11488  
 TENSILE PSI 105,120 YLD. 2% PSI 77,140  
 RED/AREA% HARDNESS 58.9 BHN 223

MACRO TEST OK  
 MATERIAL ANNEALED AT 1950 DEG. F. - WATER QUENCHED.  
 ELECTRIC FURNACE AOD MELTED

8/26/07

THANK YOU FOR SELECTING A QUALITY PRODUCT MELTED AND MANUFACTURED WITH PRIDE AT CRUCIBLE INDUSTRIES LLC LOCATED IN SOLVAY, NY 13209, USA.  
 WE PROVIDE MATERIAL THAT IS FREE FROM MERCURY CONTAMINATION AND RADIATION AT THE TIME OF SHIPMENT. NO WELD REPAIR IS DONE. CRUCIBLE INDUSTRIES LLC HOLDS A CERTIFICATE OF REGISTRATION TO ISO 9001:2008, PRESSURE EQUIPMENT DIRECTIVE (PED) 97/23/EC 7/2 ANNEX 1, PARAGRAPH 4.3 AND WORKS UNDER THE GUIDELINES OF NCA 3800 USING QP MANUAL DATED 3/10/11. WE ARE COMPLIANT WITH EU DIRECTIVE 2002/95/EC (ROHS), REACH, EN 10204 BAR, IN COMPLIANCE WITH INDUSTRY STANDARDS ASTM A370, E8, E10, E18, E23, E45, E112, E381, E604, E672, E1019 AND E1086. THE RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FEDERAL STATUTES, INCLUDING FEDERAL LAW, TITLE 18, CHAPTER 47, PRODUCTS, TECHNICAL DATA, TECHNOLOGY, AND SERVICES OF CRUCIBLE INDUSTRIES LLC ARE SUBJECT TO U.S. EXPORT CONTROLS UNDER THE APPLICABLE LAWS AND REGULATIONS OF THE UNITED STATES.

THE ABOVE MATERIAL WAS MANUFACTURED AND TESTED ACCORDANCE WITH ABOVE SPECIFICATIONS AND IS IN CONFORMANCE WITH THE SPECIFICATION REQUIREMENTS.

*William J. Macfarlane*  
 CRUCIBLE INDUSTRIES LLC

CERTIFIED BY



# COPPER AND BRASS SALES

MATERIAL TYPE

STAINLESS STEEL

AISI SERIES

200 300 400

AND

PRECIPIT HARDENING GRADES

## "WARNING"

INHALATION OF FUMES, FRESHLY GENERATED BY THE WELDING OF STAINLESS STEEL CONTAINING ONE OR MORE OF THE FOLLOWING INGREDIENTS, ZINC, MAGNESIUM OR COPPER, ARE KNOWN TO CAUSE METAL FUME FEVER, INFLAMMATION OF DUST OR FUME FROM STAINLESS STEEL CONTAINING ONE OR MORE OF THE FOLLOWING INGREDIENTS, ALUMINUM, IRON, MANGANESE, SELENIUM, OR TIN, HAS ALSO BEEN REPORTED TO CAUSE METAL FUME FEVER AND MAY CAUSE IRRITATION TO THE RESPIRATORY TRACT AND/OR AGGRAVATE PRE-EXISTING CONDITIONS. TARGET ORGAN IS PRIMARILY THE LUNG.

THIS PRODUCT MAY CONTAIN CHROMIUM, NICKEL OR COBALT. EXPOSURE TO DUST OR FUME MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS AND KIDNEY AND LIVER DAMAGE. UNDER HIGH TEMPERATURES, HEXAVALENT CHROMIUM MAY BE REPRODUCED, IF IN THE INSOLUBLE FORM. IT IS A CONFIRMED HUMAN CARCINOGEN. THIS PRODUCT MAY ALSO CONTAIN NICKEL AND COBALT. INHALATION OF NICKEL OR COBALT DUST OR FUME MAY RESULT IN INFLAMMATION OF THE RESPIRATORY TRACT. NICKEL AND COBALT HAVE BEEN IDENTIFIED AS POTENTIAL HUMAN CARCINOGENS.

IF COATED WITH OIL, MAY CAUSE SKIN IRRITATION/DERMATITIS BY CONTACT. WELDING FUME IS LISTED AS A POSSIBLE CARCINOGENIC TO HUMANS.

READ THE STAINLESS STEEL MATERIAL SAFETY DATA SHEET (MSDS) ON FILE WITH YOUR EMPLOYER BEFORE WORKING WITH THIS MATERIAL.

- \* If processing or recycling produces particulate, use exhaust ventilation or other controls designed to prevent exposure to workers. Examples of such activities include melting, welding, grinding, abrasive sawing, sanding and polishing. Any activity which abrades the surface of this material can generate airborne particulate. Use appropriate NIOSH approved respiratory protection (P95; P100 for lead with, quantitative fit testing required) if exposures exceed the permissible limits.
- \* The Occupational Safety and Health Administration (OSHA) have set mandatory limits on occupational exposures. \* Stainless steel, in solid form and as contained in finished products presents no special health risk.
- \* Sold for manufacturing purposes only. This product can be recycled; contact your sales representative.

The Occupational Safety and Health Administration require employers to provide training in the proper use of this product.

For additional information, call or write to Copper and Brass Sales, 22355 West Eleven Mile Road, Southfield, MI 48033, telephone 248-233-5600, or visit our web site @ [www.copperandbrass.com](http://www.copperandbrass.com).

# CERTIFIED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA DAVENPORT WORKS

Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

Per:

*Kenton P. Young*

Kenton P. Young  
Quality Assurance Manager

Malcolm Murphy  
Director of Manufacturing Davenport Works

Ship To: COPPER & BRASS SALES INC  
415 STATE PARKWAY  
SCHAUMBURG 60195 IL

1207913  
Ship Date 2011-02-05 B.L. No. 5639213 Invoice No. 00000 Alcoa No. Item 1000258640-1 DS-58640-1  
P.O. No./Govt Contract No. 5400087707 Int#: 0010 C&B G041099100R03

Item Description  
0.032 IN TK (+0.0000 -.0025) X 48.0 IN W (+.125 -.125) X 144.0 IN LN (+.15625 -.15625) CAT X 063485-7 (N) A/T 6061-T6 FLAT SHEET FOR DISTRIBUTORS TOLERANCE  
GUARANTEED ALFIR01643 AMS4027 REV N EXC MRK  
ASTMB209 REV 07 ((MARKED)) KRAFT PAPER  
INTERLEAVED MAX GROSS  
SKID WGT: 4000 LB QUAN TOL +/-30 %  
COR 0214138 REV 03 CUST REQ 11-02-05 \*\*\* W/E 11-02-26 \*\*\*

Num	Package Ticket	Lot	Weight	Quantity	UOM	Inspector Clock Numbers
1	276084	500103	3569	175	PC	27740 47311 47353
2	276086	500103	3607	175	PC	27740 47311 47353
3	276108	500103	2014	98	PC	27740 47311 47353
4	276110	500103	3591	175	PC	27740 47311 47353
			12781	623		

Notes for COR: 0214138.3  
PRODUCT PRODUCED TO THE REQUIREMENTS OF AMS4027 REV N ALSO MEET THE REQUIREMENTS OF AMS-QQ-A-250\_11 ORIGINAL REVISIO N DATED 1997-08-01.

COR: 0214138.3 -Specification Limits -----

Tmpr Dir T6 Long Transv. Max Min 42.0 35.0 10  
UTS KSI EL4D PCT

Chemical Composition Alloy 6061  
SI FE CU MN MG CR ZN TI Each Total Aluminum  
Max 0.8 0.7 0.40 0.15 1.2 0.35 0.25 0.15 0.05 0.15  
Min 0.40 0.15 0.8 0.04 REMAIN

COPPER AND BRASS SALES  
SOLD TO: TCMNA - ECAD  
DATE: 6/20/11 QTY: 2 PC  
CUSTOMER PO: PEC-231057  
SHIPPER NO: 2401322912  
BY: PBP

# CERTIFIED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA DAVENPORT WORKS

Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

*Kenton P. Young*

Kenton P. Young  
Quality Assurance Manager

Malcolm Murphy  
Director of Manufacturing Davenport Works

1207913 0  
Ship Date B.L. No. Invoice No. Alcoa No. Item Page 2  
2011-02-05 5639213 00000 1000258640-1 DS-58640-1  
P.O. No./Govt Contract No. Customer Alcoa Item  
5400087707 Ln#: 0010 C&B G041099100R03

CQR: 0214138.3 -Specification Limits (cont.) -----  
Lot: 500103 - Mechanical, Physical, Metallurgy, Quantometer Results -----  
No-> UTS TYS EL4D  
Test KSI KSI PCT  
2 48.8 39.6 13.5  
Long Transv. 48.7 39.8 13.1

Cast Number Chemical - OES SI FE CU MN MG CR ZN TI  
H9869074 Actuals 0.62 0.4 0.29 0.08 1.1 0.20 0.13 0.02

This material was melted in the United States or a Qualifying Country [REF DFARS 225.872.1(a)]; it was manufactured in the United States

## COPPER AND BRASS SALES

## MATERIAL TYPE

## ALUMINIUM ALLOYS

## PRODUCT DESIGNATION

1100 1350 3003 3004 3105 5005 5083 5086 5182 5454 6061 6063

## "WARNING"

SMALL CHIPS, FINE TURNINGS AND DUST MAY IGNITE READILY. EXPLOSIONPOTENTIAL MAY BE PRESENT WHEN DUST OR FINES ARE DISPERSED IN THE AIR; FINE, DUST OR MOLTEN ALUMINUM ARE IN CONTACT WITH CERTAIN METAL OXIDES; OR, CHIPS, FINES, DUST OR MOLTEN ALUMINUM ARE IN CONTACT WITH WATER OR MOISTURE. KEEP AWAY FROM IGNITION SOURCE. USE EXPLOSION-PROOF VENTILATION. KEEP MATERIAL DRY.

INHALING LARGE AMOUNTS OF COPPER, MAGNESIUM OXIDE, MANGANESE OXIDE, AND ZINC OXIDE FUMES OR DUST MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS. CHRONIC OVEREXPOSURE TO COPPER MAY CAUSE THICKENING OF THE SKIN; AND SKIN, TEETH, AND HAIR DISCOLORATION. CHRONIC OVEREXPOSURE TO MANGANESE DUST CAN CAUSE CENTRAL NERVOUS SYSTEM DAMAGE, SCARRING OF THE LUNGS AND REPRODUCTIVE HARM IN MALES. TARGET ORGAN IS PRIMARILY THE LUNG, BUT REPEATED HIGH EXPOSURE CAN ALSO AFFECT THE LIVER. CHRONIC OVEREXPOSURE TO TIN DUST OR IRON OXIDE DUST/FUME MAY CAUSE LUNG FIBROSIS. CHRONIC OVEREXPOSURE TO SILICON DUST CAN CAUSE CHRONIC BRONCHITIS.

THIS PRODUCT ALSO CONTAINS LEAD AND CHROMIUM COMPOUNDS. LEAD IS KNOWN TO CAUSE REPRODUCTIVE TOXICITY AND IS A KNOWN CARCINOGEN. EXPOSURE TO CHROMIUM DUST OR FUME MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS AND KIDNEY AND LIVER DAMAGE. UNDER HIGH TEMPERATURES, HEXAVALENT CHROMIUM MAY BE PRODUCED. IF IN THE INSOLUBLE FORM, IT IS A CONFIRMED HUMAN CARCINOGEN. (CALIFORNIA PROPOSITION 65). IF COATED WITH OIL, MAY CAUSE SKIN IRRITATION/DERMATITIS BY CONTACT. WELDING FUME IS LISTED AS A POSSIBLE CARCINOGENIC TO HUMANS. READ THE ALUMINIUM/ALUMINIUM ALLOYS MATERIAL SAFETY DATA SHEET (MSDS) ON FILE WITH YOUR EMPLOYER BEFORE WORKING WITH THIS MATERIAL.

\* If processing or recycling produces particulate, use exhaust ventilation or other controls designed to prevent exposure to workers. Examples of such activities include melting, welding, grinding, abrasive sawing, sanding and polishing. Any activity which abrades the surface of this material can generate airborne particulate. Use appropriate NIOSH approved respiratory protection (P95; P100 for lead with, quantitative fit testing required) if exposures exceed the permissible limits.

\* The Occupational Safety and Health Administration (OSHA) have set mandatory limits on occupational exposures.

\* Aluminum, in solid form and as contained in finished products presents no special health risk.

\* Sold for manufacturing purposes only. This product can be recycled; contact your sales representative.

The Occupational Safety and Health Administration require employers to provide training in the proper use of this product.

PO/Rel 14312

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Sign by *[Signature]*



TEL: (416)745-4444 FAX: (416)745-0925 1-800-668-7210  
 411 CHRISLEA ROAD, WOODBRIDGE, ONTARIO, CANADA L4L 8N4  
 http://www.extrudex.com

**MILL TEST REPORT**

BILL TO THYSSENKRUPP MATERIALS NA SHIP TO	Cert Code 1	DIE NUMBER S 22440	DATE OF SHIPMENT 5/17/2011	EXTRUDEX ORDER NO. 133883 - 2	MANIFEST NO. 246422
THYSSENKRUPP MATERIALS NA SO DESCRIPTION 4"X.250" RF AN	CUSTOMER PO PEC-229958	ALLOY 6061	TEMPER T6511	MADE IN CANADA	
CUSTOMER PART NUMBER			PART DESCRIPTION FORBES DODWELL		

**Mechanical Properties**

Lot	Alloy	Test No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation	Hardness	Conductivity
A.11	6061	14280	May/16/11	44.3	41.3	14.50	89.8,89.6,90.1	

**Chemical Composition**

Cast Member	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	B	Zr	Bi	Pb	Sn	Sr	Co	Al	Other
A.11 (2BP044) 6061	0.60	0.17	0.19	0.03	0.87	0.07	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01

*[Signature]*  
 David Natale  
 Quality Control Manager

ASTM B221  
 Acceptable  
 11.06.13

# THYSSENKRUPP MATERIALS NA

DART AEROSPACE  
ALUMINUM FLAT BAR 6061-T6511  
1.00" X 2.00" X 144.0000"  
PART NO.

P.O./Ref 14312

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results  
BL DEC 716757-002  
Pg 1/1

Signed by *diplande*



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411 CHRISLEA ROAD, WOODBRIDGE, ONTARIO, CANADA L4L 8N4  
<http://www.extrudex.com>

## MILL TEST REPORT

DATE OF SHIPMENT	4/28/2011	EXTRUDEX ORDER NO.	133341	MANIFEST NO.	245407
SALESMAN	FRED PARKIN		2		
TEMPER	T6511		MADE IN CANADA		
ALLOY	6061		CERTIFICATION		
CUSTOMER PO	PEC-229624		MILL TEST ASTM B221		
CUSTOMER PART NUMBER	1-1000-2000				

### Mechanical Properties

Lot	Alloy	Test No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation	Hardness	Conductivity
A.11	6061	13614	Apr/26/11	41.1	38.4	13.20	88.4,88.8,88.1	

### Chemical Composition

Cast Number	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ca	V	B	Zr	Bi	Pb	Sn	Sr	Co	Al	Other
A.11	0.56	0.20	0.18	0.06	0.82	0.04	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*David Natale*  
David Natale  
Quality Control Manager

MILL TEST REPORT

1 - CUSTOMER COPY

**Certificate of Mill Test Results**

**THYSSENKRUPP MATERIALS NA**

21Jun11  
Pg 1/1  
HL PRC-716757-003  
Signed by: *[Signature]*

ALUMINUM ROUND BAR 6061-T6511  
750" DIA X 144.0000"  
PART NO.  
We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

**CAN ART**  
ALUMINUM EXTRUSION INC.

**Material Test Report**

Manifest: 231015

Ticket: 5195896

Ship To: ThyssenKrupp Materials NA

2821 Langstaff Road  
Concord, ON L4K 5C6

Our Order: 377131 - 4  
Cust P.O.: 230219  
Part: 05593-000-144  
Die: ES05593  
Alloy Temper: 6061 T6511  
Description: .750  
Print Date: 6/7/11

*51104127*

Chemical Composition Range										
6061	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other Each	Other Total
Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.15
Min	0.40		0.15		0.8	0.04				

Mechanical Properties										
Sample ID	Cast #	Lot #	Test Date	Ultimate Tensile	Yield	2% Offset	Elongation	2" gage length	Strength ksi	
125741	11050713A	A11	6/6/11	48.34	43.23		11.7			

Applicable Specifications: ASTM B221-08 QA200/8  
Country of Origin: 85 Parkshore Drive, Brampton, Ontario CANADA L6T 5M1

Can Art Aluminum Extrusion Inc. certifies that materials shipped under this order have been inspected and tested in accordance with Aluminum Association and agreed upon customer specifications. Can Art assumes no liability for additional costs which may be incurred during the customer's manufacture and sale of its products, and is subject only to the replacement of any materials not within agreed upon specifications provided written notification is received by Can Art within 30 days from the date of shipment.

Ray Hussain - Tensile Testing  
Authorized:

*[Signature]*  
Evan Eng, Quality Assurance Mgr.